AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of all claims in the application.

Claims 1-23 **(Cancelled)**

24. **(Previously presented)** A method of analyzing a plurality of biochips comprising

a) inserting a first biochip into a first station of an analysis device;

b) inserting a second biochip into a second station of the analysis device,

wherein each of said first and second biochips comprise a substrate comprising:

an array of detection electrodes, each comprising:

i) a different capture binding ligand;

ii) a different target analyte; and

iii) a label; and;

a plurality of electrical contacts;

c) detecting current as an indication of the presence of said labels on said first biochip; and

d) detecting current as an indication of the presence of said labels on said second biochip.

Claims 25-29 **(Canceled)**

30. **(Previously presented)** A method according to claim 24, wherein said capture binding ligands are nucleic acid capture probes, said target analytes are target nucleic acid sequences, and said nucleic acid capture probes hybridize to said target nucleic acid sequences to form hybridization complexes.

31. **(Previously presented)** A method according to claim 30, wherein said hybridization complexes comprise said capture probes hybridized to said target sequences, respectively.

32. **(Previously presented)** A method according to claim 30, wherein said labels are covalently attached to said target sequences.

33. **(Previously presented)** A method according to claim 24 or 30, wherein said labels are hybridization indicators.

34. **(Previously presented)** A method according to claim 33, wherein said hybridization indicators are intercalators.

35. **(Previously presented)** A method according to claim 30, wherein said target sequences each comprise a first domain and a second domain, said hybridization complexes each comprise:

a) said capture probes hybridized to said first domains of said target sequences; and

b) label probes hybridized to said second domains of said target sequences.

36. **(Previously presented)** A method according to claim 35 wherein said label probes each comprise three or more covalently attached labels.

37. **(Cancelled)**

38. **(Previously presented)** A method according to claim 24, 30 or 36 wherein said labels are electron transfer moieties (ETMs).

39. **(Previously presented)** A method according to claim 38 wherein said ETMs are transition metal complexes.

40. **(Previously presented)** A method according to claim 39 wherein said transition metal complexes are metallocenes.

41. **(Previously presented)** A method according to claim 24, further comprising:

a) receiving detection information from said first biochip at a processor; and

b) receiving detection information from said second biochip at said processor.

42. **(Previously presented)** A method according to claim 41, further comprising analyzing said received detection information.

43. **(Previously presented)** A method according to claim 42, wherein said analyzing step comprises analyzing higher harmonic frequencies.